

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A pressure pulser comprising:
 - a first rotatable body in fluid communication with a flowing fluid;
 - a second body coupled to said first body and at least partially disposed within an electroactive fluid, wherein said electroactive fluid is isolated from said flowing fluid; and
 - a means for applying a field to the electroactive fluid.
2. (Original) The pulser of claim 1 wherein said first body is a mud motor.
3. (Original) The pulser of claim 1 wherein said second body comprises a shaft and said means for applying a field includes an electromagnetic coil.
4. (Original) The pulser of claim 1 wherein said second body is pump rotor circulating the electroactive fluid through a flowline.
5. (Original) The pulser of claim 4 further comprising a field-generating valve disposed on the flowline, wherein said valve has a blocked position where a field is applied to the flowline.
6. (Original) The pulser of claim 4 wherein the pulser is integrated into a drill string.
7. (Currently amended) A method for generating a pressure pulse comprising:
 - disposing a first rotatable body in flowing fluid;
 - coupling the first body to a second body disposed in an electroactive fluid, wherein said electroactive fluid is isolated from said flowing fluid;
 - applying a field to the electroactive fluid.
8. (Original) The method of claim 7 wherein the field is applied by applying a current to an electromagnetic coil.

9. (Original) The method of claim 7 wherein the field is applied by a magnetic circuit.
10. (Original) The method of claim 7 wherein said first body is a mud motor.
11. (Original) The method of claim 7 wherein said second body comprises a shaft and an electromagnetic coil.
12. (Original) The method of claim 7 wherein said second body is pump rotor circulating the electroactive fluid through a flowline.
13. (Original) The method of claim 12 further comprising a field-generating valve disposed on the flowline, wherein said valve has a blocked position where a field is applied to the flowline.
14. (Original) The method of claim 7 wherein the first and second bodies are integrated into a drill string.
15. (Original) An apparatus for generating a pressure pulse in a column of circulating fluid, the apparatus comprising:
 - a first rotating member disposed in the column of circulating fluid;
 - a chamber containing an electroactive fluid isolated from the circulating fluid;
 - a second rotating member attached to said first rotating member and at least partially contained within said chamber of electroactive fluid;
 - a magnet proximate to said chamber of electroactive fluid and switchable between first and second states so as to apply a field to the electroactive fluid in the first state and not apply a field to the electroactive fluid in the second state.
16. (Original) An apparatus for generating pressure pulses in a column of circulating fluid, the apparatus comprising:
 - a housing adapted for communicating the circulating fluid therethrough;
 - a first body in said housing and adapted for rotation in the circulating fluid;

a chamber in said housing and enclosing an electroactive fluid; wherein said chamber is isolated from the circulating fluid;

a second body in said housing and connected to said first body; wherein said second body is at least partially disposed within said chamber and has an outer surface in contact with said electroactive fluid; and

a magnet switchable between a first state applying a field to the electroactive fluid and a second state not applying a field to the electroactive fluid.

17. (Original) The apparatus of claim 16 wherein said first body is a mud motor.
18. (Original) The apparatus of claim 17 wherein said second body is a shaft.
19. (Original) The apparatus of claim 17 wherein said second body is a Moineau pump.
20. (Original) The apparatus of claim 16 wherein said magnet is an electromagnet.
21. (Original) The apparatus of claim 20 wherein said first body is a mud motor and said second body is a shaft.
22. (Original) The apparatus of claim 16 wherein said magnet is a permanent magnet.
23. (Original) The apparatus of claim 16 wherein said first body is a rotor and said second body is a shaft.
24. (Original) The apparatus of claim 23 wherein said second body extends through said chamber and is connected to a motor.